KARNATAKA TEST HOUSE PVT LTD.

MATERIAL TESTING LABORATORY

NABL Accredited Laboratory as per ISO/IEC 17025

NABL Accredited Lab Certificate No.T-0901

Report No. : KTH/C.AGG/2023-3425/2013-2014 **Date: 24.12.2013**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Improvements to C C road FROM Shakil House, Makthum sab House and Hazere House Roads at M S Palya in Ward no 11 (Kuvempunagara).

Name of Contractor* : Mr. C Jayakumar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 20.12.2013.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 40mm & down size

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	63	100	100	100	Sample confirms to Single Size of IS: Stipulation for 40mm size Aggregate Fails for Graded Stipulation.
2	40	86.4	85 to 100	95 to 100	
3	20	8.6	0 to 20	30 to 70	
4	12.5	3.2	0 to 20	-	
5	10	-	0 to 5	10 to 35	
6	4.75	-	-	0 to 5	

Sl. No.	Test Conducted	Identification mm	Results	IS : 383 – 1970 Stipulations
1	Flakiness Index (%)	40	12.09	Not specified
2	Elongation Index (%)	40	15.34	Not specified
3	Impact Value (%)	40	23.69	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C)
TECHNICAL MANAGER

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778/44, Gokul 1st Stage, 2nd Phase, 8th Cross, Triveni Road, Yeshwanthpur, Bangalore - 560 054.
Tel: 23378383 Telefax : 23375326, E-mail : kthblr@gmail.com Website : www.karnatakatesthouse.com

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Report No. : KTH/C.AGG/2023-3425a/2013-2014 **Date: 24.12.2013**

TEST REPORT ON AGGREGATE
(Coarse Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Improvements to C C road from Shakil House, Makthum sab House and Hazere House Roads at M S Palya in Ward no 11 (Kuvempunagara).

Name of Contractor* : Mr. C Jayakumar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 20.12.2013.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Coarse Aggregate - 20mm

Sl. No.	Sieve size mm	% Passing	IS : 383-1970 Stipulations		Remarks
			Single Size	Graded Size	
1	40	100	100	100	Sample confirms to Single Size of IS: Stipulation for 20mm size Aggregate Fails for Graded Stipulation
2	20	86.9	85 to 100	95 to 100	
3	16	38.4	-	-	
4	10	6.5	0 to 20	25 to 55	
5	4.75	0.9	0 to 5	0 to 10	

Sl. No.	Test Conducted	Identification mm	Results %	IS : 383 – 1970 Stipulations
1	Flakiness Index (%)	20	10.34	Not specified
2	Elongation Index (%)	20	14.28	Not specified
3	Crushing Value (%)	20	23.61	Shall not be more than 45% for Concrete and 30% for Wearing surfaces, such as runways, roads and pavements.

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

KARNATAKA TEST HOUSE PVT LTD NABL Accredited Laboratory

(SREENIVASA.C)
TECHNICAL MANAGER

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Report No. : KTH/F.AGG/2023-3426/2013-2014 **Date: 24.12.2013**

TEST REPORT ON AGGREGATE

(Fine Aggregate)

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Improvements to C C road from Shakil House, Makthum sab House and Hazere House Roads at M S Palya in Ward no 11 (Kuvempunagara).

Name of Contractor* : Mr. C Jayakumar, Bangalore.

Source of Sample : Supplied by the Customer.

Sample Received on : 20.12.2013.

Technical Reference : IS : 2386 Part I to VIII– 1963 (Reaffirmed-2002), IS : 383 – 1970.

Sieve Analysis of Fine Aggregate (River Sand)

Sl. No.	Sieve size mm	% Passing	IS : 383 – 1970 Specification				Remarks
			% passing for Zone I	% passing for Zone II	% passing for Zone III	% Passing for Zone IV	
1	10	100	100	100	100	100	Falls in Zone –II as per table 4 of IS-383 – 1970 Suitable for Construction.
2	4.75	95.0	90 – 100	90 – 100	90 – 100	95 - 100	
3	2.36	89.5	60 – 95	75 – 100	85 – 100	95 - 100	
4	1.18	72.8	30 – 70	55 – 90	75 – 100	90 - 100	
5	0.600	58.5	15 – 34	35 – 59	60 – 79	80 - 100	
6	0.300	19.2	5 – 20	8 – 30	12 – 40	15 to 50	
7	0.150	4.7	0 – 10	0 – 10	0 – 10	0 to 15	

Sl. No.	Test Conducted	Results	IS : 383 – 1970 Stipulations
1.	Silt Content (%)	1.86	-

* As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C)
TECHNICAL MANAGER

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Report No. : KTH/CEMENT/2023-3427/2013-2014 **Date: 28.12.2013**

PHYSICAL TEST REPORT ON CEMENT

Interim 3 & 7 days

Name of the Customer* : **The Assistant Executive Engineer,**
Vidyaranyapura Sub Division,
BBMP, Bangalore - 97.

Name of the Project* : Improvements to C C road from Shakil House, Makthum sab House and Hazere House Roads at M S Palya in Ward no 11 (Kuvempunagara).

Name of Contractor* : Mr. C Jayakumar, Bangalore.

Source of Sample : Supplied by the Customer.

Type of cement* : Ordinary Portland Cement (OPC)

Brand of cement* : Dalmia 43 Grade.

Sample Received on : 20.12.2013.

Period of test : 21.12.2013 to 28.12.2013.

Technical Reference : IS: 4031(Part I–VI) 1988 (Reaffirmed–2000) & IS : 8112-1989

Sl. No.	Test Conducted	Results	IS: 8112-1989 Stipulation	Remarks
1	Normal consistency	29.25 %	Not specified	-
2	Initial setting time	126 minutes	Shall not be less than 30 minutes	P
3	Final setting time	245 minutes	Shall not be more than 600 minutes	P
4	Compressive strength (Average of three results) a. 72+1h (3 days) b. 168+2h (7 days) c. 672+4h (28 days)	 24.88 MPa 35.19 MPa T.T.C	 Shall not be less than 23.0 MPa Shall not be less than 33.0 MPa Shall not be less than 43.0 MPa	 P P -
5	Fineness (By Blaine's air permeability method)	271.11 m^2/kg	Shall not be less than 225m^2/kg	P
6	Soundness (Le-chatlier's method)	1.03 mm	Shall not be more than 10 mm	P

P: Passes IS requirement F: Fails IS requirement T.T.C: Test To be Conducted.
*As furnished by the Customer

For **KARNATAKA TEST HOUSE PVT. LTD.**

(SREENIVASA.C.)
TECHNICAL MANAGER

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Report No. : KTH/CT/2023-3428/2013-2014 **Date: 21.12.2013**

TEST REPORT ON CONCRETE CUBES

To,

The Assistant Executive Engineer,
Vidyaranyapura Sub Division,
BBMP Bangalore - 97.

Name of the Project*: - Improvements to C C road from Shakil House, Makthum sab House and Hazere House Roads at M S Palya in Ward no 11 (Kuvempunagara).

Name of the Contractor* : Mr. C Jayakumar, Bangalore.

Sample Received on: 20.12.2013

Compressive Strength test as per IS: 516-1959 (Reaffirmed 1999) has been conducted on the concrete cube specimens, supplied by the Customer and the results are tabulated here below:

Dimension of Specimen: 150mmx150mmx150mm

Sl. No	Cubes pertaining to the concrete cast at*(Details of structural member identification)	Grade of Concrete*	Date of casting*	Date of Testing	Age of Concrete on the date of test**	Contact area (mm^2)	Weight of Specimen (Kg)	Load in KN	Compressive Strength in N/mm^2	Remarks
1.	Road Concrete	M_{20}	04.12.2013	20.12.2013	16 days	22500	8.000	501	22.27	Pass
2.	"	"	"	"	"	"	8.000	550	24.44	Pass
3.	"	"	"	"	"	"	7.970	517	22.98	Pass

1 N/Sq.mm = 10Kg/Sq.cm.(Approx.)
*As Furnished by the Customer
**Based on the data furnished by the Customer
Note: A minimum of three cube specimens shall be supplied for testing as per IS:516-1959.

for ***KARNATAKA TEST HOUSE PVT. LTD.***

KARNATAKA TEST HOUSE PVT. LTD. BANGALORE-54

(SREENIVASA.C.)
TECHNICAL MANAGER

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